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L54  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:20506  HCAPLUS
DN   140:87707
ED   Entered STN:  11 Jan 2004
TI   Oligosaccharide therapeutic compositions for use in prophylaxis or
     treatment of diarrheas
IN   Angstroem, Jonas; Teneberg, Susann; Saarinen, Juhani; Satomaa, Tero;
     Roche, Niamh; Natunen, Jari; Miller-Podraza, Halina; Karlsson,
     Karl-Anders; Milh, Maan Abul
PA   Biotie Therapies Oy, Finland
SO   PCT Int. Appl., 156 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  A61K0031-702
     ICS  A61P0001-04; A61P0001-12
CC   1-9 (Pharmacology)
     Section cross-reference(s): 10, 14, 18, 33, 63
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   WO 2004002495        A1    20040108    WO 2003-FI528          20030630
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003242799         A1    20040119    AU 2003-242799         20030630
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EP 1531832		A1	20050525	EP 2003-761605	20030630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
JP 2006506329		T2	20060223	JP 2004-516828	20030630
US 2006014717		A1	20060119	US 2005-518297	20050824
PRAI FI 2002-1275		A	20020628		
FI 2003-564		A	20030414		
WO 2003-FI528		W	20030630		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004002495	ICM	A61K0031-702
	ICS	A61P0001-04; A61P0001-12
	IPCI	A61K0031-702 [ICM,7]; A61P0001-04 [ICS,7]; A61P0001-12 [ICS,7]; A61P0001-00 [ICS,7,C*]
	IPCR	A61K0031-702 [I,A]; A61K0031-702 [I,C*]
	ECLA	A61K031/702
AU 2003242799	IPCI	A61K0031-702 [ICM,7]; A61P0001-04 [ICS,7]; A61P0001-12 [ICS,7]; A61P0001-00 [ICS,7,C*]
	IPCR	A61K0031-702 [I,A]; A61K0031-702 [I,C*]
EP 1531832	IPCI	A61K0031-702 [ICM,7]; A61P0001-04 [ICS,7]; A61P0001-12 [ICS,7]; A61P0001-00 [ICS,7,C*]
	IPCR	A61K0031-702 [I,A]; A61K0031-702 [I,C*]
	ECLA	A61K031/702
JP 2006506329	IPCI	A61K0031-7016 [I,A]; A23C0009-152 [I,A]; A23L0001-00 [I,A]; A23L0003-3472 [I,A]; A23L0003-3463 [I,C*]; A61K0008-60 [I,A]; A61K0008-30 [I,C*]; A61K0008-00 [I,A]; A61Q0011-00 [I,A]; A61K0009-14 [I,A]; A61K0031-702 [I,A]; A61K0031-7032 [I,A]; A61K0031-7028 [I,C*]; A61K0047-48 [I,A]; A61P0001-00 [I,A]; A61P0001-12 [I,A]; A61P0003-02 [I,A]; A61P0003-00 [I,C*]; A61P0011-00 [I,A]; A61P0031-04 [I,A]; A61P0031-00 [I,C*]; C07H0007-027 [I,A]; C07H0007-00 [I,C*]; C08B0037-08 [I,A]; C08B0037-00 [I,C*]; C12Q0001-04 [I,A]; G01N0033-569 [I,A]; B01D0039-00 [N,A]; C07H0003-06 [N,A]; C07H0003-00 [N,C*]
	FTERM	4B001/AC35; 4B001/EC99; 4B021/LW05; 4B021/MC01; 4B021/MK04; 4B021/MK28; 4B035/LC09; 4B035/LE03; 4B035/LP44; 4B035/LP59; 4B063/QA01; 4B063/QA18; 4B063/QA19; 4B063/QQ02; 4B063/QQ03; 4B063/QQ06; 4B063/QR43; 4B063/QR45; 4B063/QR48; 4B063/QR55; 4B063/QR56; 4B063/QR84; 4B063/QS32; 4B063/QS36; 4B063/QX07; 4C057/AA05; 4C057/BB04; 4C057/CC03; 4C057/DD02; 4C057/EE02; 4C076/AA31; 4C076/CC32; 4C076/CC40; 4C076/EE59; 4C076/GG22; 4C083/AD211; 4C083/BB55; 4C083/CC01; 4C083/CC41; 4C083/EE31; 4C083/FF01; 4C086/AA01; 4C086/AA02; 4C086/AA03; 4C086/EA01; 4C086/EA06; 4C086/MA01; 4C086/MA04; 4C086/MA52; 4C086/NA14; 4C086/ZA66; 4C086/ZA73; 4C086/ZB35; 4C090/AA02; 4C090/AA08; 4C090/AA09; 4C090/BA47; 4C090/BD35; 4C090/BD36; 4C090/BD41; 4C090/CA35; 4C090/DA06; 4C090/DA09; 4C090/DA23; 4C090/DA24; 4C090/DA26; 4C090/DA27; 4C090/DA31; 4D019/AA02; 4D019/BA12; 4D019/BA13; 4D019/BC05
US 2006014717	IPCI	A61K0039-02 [I,A]; A61K0031-739 [I,A]
	NCL	514/054.000
	ECLA	A61K031/702

AB The invention provides a therapeutic composition comprising purified fractions of compds. being or containing a pathogen-inhibiting oligosaccharide sequence for use as a medicament. The invention especially describes an

oligosaccharide-containing substance or receptor binding to diarrheagenic Escherichia coli and/or zoonotic Helicobacter species, and use thereof in e.g. pharmaceutical, nutritional and other compns. for prophylaxis and treatment of conditions due to the presence of Escherichia coli and/or zoonotic Helicobacter species. The invention is also directed to the use of the receptors for diagnostics of Escherichia coli and/or zoonotic Helicobacter species.

ST oligosaccharide diarrhea treatment diarrheagenic Escherichia coli; zoonotic Helicobacter oligosaccharide diarrhea treatment; diagnosis Escherichia Helicobacter receptor

IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Galα4Gal; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Blood-group substances
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Lea; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Blood-group substances
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Lex; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Glycosides
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Me; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigenic carbohydrate conjugate, carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Food
(aqueous, pathogen purification from; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bacterial, carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Infection
(bacterial; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Bos taurus
Milk
(bovine milk fraction; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Cell
Particles
(carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Polymers, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Detergents
(cleaning compns.; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Infection

(digestive tract; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Escherichia coli
(enteroaggregative; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Escherichia coli
(enterohemorrhagic; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Escherichia coli
(enteroinvasive; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Escherichia coli
(enteropathogenic; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Escherichia coli
(enterotoxigenic; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Intestine
Larynx
Stomach
(epithelium; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Water purification
(filtration; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Food
(food product surface, coating; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fucosyl; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ganglio-; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT **Gangliosides**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ganglioseries ganglioside oligosaccharides; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Epithelium
(gastric; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Drugs
(gastrointestinal, prebiotics; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Oligosaccharides, biological studies
RL: DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(globooligosaccharides; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT **Carbohydrates, biological studies**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycosylamides; oligosaccharide therapeutic compns. for use in

prophylaxis or treatment of diarrheas)
IT **Carbohydrates, biological studies**
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycosylamines; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Kidney, disease
(hemolytic-uremic syndrome; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Inflammation
Intestine, disease
(hemorrhagic colitis; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Milk substitutes
(human; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Immune system
(immune cell; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(immune defense; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Immunostimulants
(immunostimulating carbohydrate conjugate, carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Digestive tract, disease
(infection; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Parasite
(intestinal eukaryotic; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Epithelium
(intestinal; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lacto-; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lactosylceramide; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neolacto-; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Oligosaccharides, biological studies
RL: DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neolactooligosaccharides; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)
IT Nutrition, animal
(nutritional composition; oligosaccharide therapeutic compns. for use in

prophylaxis or treatment of diarrheas)

IT Aeromonas
Antibacterial agents
Antidiarrheals
Antiviral agents
Campylobacter
Campylobacter jejuni
Chewing gum
Cosmetics
Dentifrices
Diarrhea
Disinfectants
Entamoeba
Escherichia coli
Filters
Food preservatives
Gastrointestinal agents
Helicobacter bilis
Helicobacter canis
Helicobacter felis
Helicobacter hepaticus
Helicobacter mustelae
Helicobacter pylori
Human
Listeria
Lung, disease
Microorganism
Mouthwashes
Parasiticides
Pathogen
Probiotics
Rotavirus
Salmonella
Salmonella typhimurium
Shigella
Vibrio
Vibrio cholerae
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Agglutinins and Lectins
Antibodies and Immunoglobulins
Glycosphingolipids
Mannose receptors
Sialic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Glycosides
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Oligosaccharides, biological studies
RL: DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Sialooligosaccharides
RL: DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT **Sialic acids**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT **Carbohydrates, biological studies**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Hygiene
(oral; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Beverages
(pathogen purification from; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Agglutination
(pathogen; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(pathogen; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Eubacteria
(polysaccharide, carrier; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Washing
(products; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein-linked receptors; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protein-linked; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Receptors
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialic acid; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Drug delivery systems
(tablets; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Drug delivery systems
(topical; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Drugs
(veterinary; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Infection
(viral; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT Helicobacter
(zoonotic; oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 59-23-4, Galactose, biological studies 2438-80-4, Fucose 3458-28-4,

Mannose 3646-73-9, α-D-Galactopyranose 4682-48-8D, hydroxy derivs. 6696-41-9 7296-15-3, α-D-Mannopyranose 7296-64-2, β-D-Galactopyranose 11034-93-8 12244-28-9 13117-26-5 14131-68-1 21646-00-4 34141-02-1 35960-33-9 47491-70-3 56573-54-7 60267-39-2 69345-49-9 69401-47-4 71012-19-6 71833-54-0 71833-57-3 71833-58-4 71950-33-9 71965-57-6 72067-19-7 72626-26-7 72711-52-5 73379-94-9 73467-80-8 77538-29-5 77538-33-1 77538-38-6 78990-73-5 81544-23-2 85305-87-9 85305-88-0 86993-34-2 89678-50-2 91847-18-6 91847-19-7 96119-72-1 99147-61-2 99147-62-3 102619-58-9 104443-59-6 104443-62-1 113255-27-9 186467-26-5 338445-12-8
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 3554-90-3 4682-48-8, Lactosylceramide 4682-48-8D, Lactosylceramide, derivs. 21973-23-9 29923-15-7 35890-38-1 35890-39-2 54832-51-8 69975-81-1 69975-82-2 75645-24-8 75645-25-9 78969-47-8 81275-44-7 81693-22-3 82667-79-6 84593-23-7 85178-80-9 87856-44-8 92448-21-0 92448-22-1 95210-85-8 98603-84-0 101927-85-9 122560-33-2 133155-91-6 136247-78-4 136247-80-8 140913-64-0 190599-29-2 524729-99-5 642408-21-7 642408-32-0 642408-37-5 642408-40-0 642408-47-7
RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 13007-32-4, LNnt 14116-68-8, LNT 66580-68-5
RL: DGN (Diagnostic use); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 20768-11-0 24656-24-4 41263-94-9 52630-68-9 56822-52-7 60797-31-1 66492-29-3 71208-06-5 81329-67-1 82993-43-9 95983-78-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 63-42-3, Lactose 9012-76-4, Chitosan 36016-38-3 42989-85-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

IT 9012-76-4DP, Chitosan, derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(oligosaccharide therapeutic compns. for use in prophylaxis or treatment of diarrheas)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(2) Carbion Oy; WO 02056893 A1 2002 HCAPLUS
(3) Krivan, H; US 5217715 A 1993 HCAPLUS
(4) Nutricia, N; WO 0033854 A1 2000 HCAPLUS
(5) Synsorb Biotech Inc; WO 9639190 A1 1996 HCAPLUS
(6) The Governors Of The University Of Alberta; WO 0051644 A1 2000 HCAPLUS

L54 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **2003:610465** HCAPLUS
DN **139:144015**
ED Entered STN: 08 Aug 2003

TI Sialic acid-containing carbohydrates for immunomodulation and the prevention and treatment of infections
IN **Stahl, Bernd**; **Kelm, Soerge**; **Boehm, Guenther**; **Finke, Berndt**; Slaghius, Joerg
PA **N.V. Nutricia, Neth.**
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA German
IC ICM C07H0015-00
CC 1-12 (**Pharmacology**)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003064439	A2	20030807	WO 2003-EP980	20030131 <--
WO 2003064439	A3	20040122		
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
DE 10204000	A1	20030814	DE 2002-10204000	20020201 <--
EP 1470142	A2	20041027	EP 2003-734720	20030131 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1646554	A	20050727	CN 2003-807549	20030131 <--
US 2005070464	A1	20050331	US 2004-502049	20040730 <--
PRAI DE 2002-10204000	A	20020201 <--		
WO 2003-EP980	W	20030131 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003064439	ICM	C07H0015-00
	IPCI	C07H0015-00 [ICM,7]
	IPCR	A23C0009-00 [I,C*]; A23C0009-20 [I,A]; A23F0003-00 [I,C*]; A23F0003-30 [I,A]; A23L0001-09 [I,A]; A23L0001-09 [I,C*]; A23L0001-29 [I,A]; A23L0001-29 [I,C*]; C07H0007-00 [I,C*]; C07H0007-027 [I,A]; C07H0017-00 [I,C*]; C07H0017-04 [I,A]
	ECLA	A23C009/20; A23F003/30; A23L001/09; A23L001/29F; C07H007/027; C07H017/04
DE 10204000	IPCI	C08B0037-00 [ICM,7]; A61K0031-715 [ICS,7]; A23L0001-30 [ICS,7]
	IPCR	A23C0009-00 [I,C*]; A23C0009-20 [I,A]; A23F0003-00 [I,C*]; A23F0003-30 [I,A]; A23L0001-09 [I,A]; A23L0001-09 [I,C*]; A23L0001-29 [I,A]; A23L0001-29 [I,C*]; C07H0007-00 [I,C*]; C07H0007-027 [I,A]; C07H0017-00 [I,C*]; C07H0017-04 [I,A]
	ECLA	A23C009/20; A23F003/30; A23L001/09; A23L001/29F; C07H007/027; C07H017/04
EP 1470142	IPCI	C07H0007-027 [ICM,7]; C07H0007-00 [ICM,7,C*]; C07H0017-04 [ICS,7]; C07H0017-00 [ICS,7,C*]; A61K0031-702 [ICS,7]; A61P0037-00 [ICS,7]; A23L0001-09 [ICS,7]
	IPCR	A23C0009-00 [I,C*]; A23C0009-20 [I,A]; A23F0003-00 [I,C*]; A23F0003-30 [I,A]; A23L0001-09 [I,A]; A23L0001-09 [I,C*]; A23L0001-29 [I,A]; A23L0001-29 [I,C*]; C07H0007-00 [I,C*]; C07H0007-027 [I,A]; C07H0017-00 [I,C*]; C07H0017-04 [I,A]
CN 1646554	IPCI	C07H0007-027 [ICM,7]; C07H0007-00 [ICM,7,C*]; C07H0017-04 [ICS,7]; C07H0017-00 [ICS,7,C*]; A61K0031-702 [ICS,7]; A61P0037-00 [ICS,7]; A23L0001-09

[ICS,7]
IPCR A23C0009-00 [I,C*]; A23C0009-20 [I,A]; A23F0003-00 [I,C*]; A23F0003-30 [I,A]; A23L0001-09 [I,A]; A23L0001-09 [I,C*]; A23L0001-29 [I,A]; A23L0001-29 [I,C*]; C07H0007-00 [I,C*]; C07H0007-027 [I,A]; C07H0017-00 [I,C*]; C07H0017-04 [I,A]

US 2005070464 IPCI A61K0038-16 [ICM,7]; A61K0031-739 [ICS,7]
IPCR A23C0009-00 [I,C*]; A23C0009-20 [I,A]; A23F0003-00 [I,C*]; A23F0003-30 [I,A]; A23L0001-09 [I,A]; A23L0001-09 [I,C*]; A23L0001-29 [I,A]; A23L0001-29 [I,C*]; C07H0007-00 [I,C*]; C07H0007-027 [I,A]; C07H0017-00 [I,C*]; C07H0017-04 [I,A]
NCL 514/008.000
ECLA A23C009/20; A23F003/30; A23L001/09; A23L001/29F; C07H007/027; C07H017/04

AB The invention discloses the use of **sialic** acid-containing carbohydrates [**Sia**(α2-3)- **Gal-HexNac**(X)-**Hex**(X)-C]n-V, containing at least one carbohydrate unit [**Sia**(α2-3)- **Gal-HexNac**(X)-**Hex**(X)-C]n- [**Sia** = α2-3-linked **sialic** acid or **sialic** acid derivative; **Gal** = galactose monosaccharide unit; **HexNac** = N-acetylated galactosamine or glucosamine monosaccharide unit (GalNAc or GlcNAc); **Hex** = galactose or glucose monosaccharide unit (**Gal** or Glc); C = **HexNac** or **Hex** or is absent; n = 1 - 50; V = OH, carbohydrate radical, connecting point on a carrier T, with proviso; X = **sialic** acid or **sialic** acid derivative, wherein second or more **sialic** acid or **sialic** acid derivative can be connected via α2-8 bond, phosphate, sulfate, carboxyl, or monosaccharide having phosphate, sulfate, or carboxyl and only one of the radicals X is present] for immune modulation, immune suppression, and the prevention and treatment of infections in humans and animals.

ST sialic acid carbohydrate immunomodulation immunosuppression infection treatment

IT Food
(aqueous; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Tea products
(beverages, instant; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Drug delivery systems
(bronchial; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT **Gangliosides**
Glycolipids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Food
(dietetic; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Infection
(digestive tract; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Drug delivery systems
(gastric; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)

IT Blood
Digestive tract, disease
Respiratory system, disease

Urogenital system, disease
(infection; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(infusions; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(lingual; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(mucosal; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(nasal; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Pharynx
(nasopharynx, infection; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Aging, animal
(old and weak persons; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(oral; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(powders; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(sachets; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Anti-infective agents
Drug delivery systems
Health food
Human
Immunomodulators
Immunosuppressants
Infection
Milk substitutes
Pregnancy
(sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT **Sialic acids**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT **Carbohydrates, biological studies**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Food
(solid; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(tablets, effervescent; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(topical; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Infection

(urogenital; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drug delivery systems
(vaginal; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Drugs
(veterinary; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT Caseins, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(κ-, glycomacropeptides; sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT **12707-58-3, Ganglioside GD1a**
59247-13-1, Ganglioside GT1b
73904-49-1, Ganglioside GT1c
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
IT **12707-58-3, Ganglioside GD1a**
59247-13-1, Ganglioside GT1b
73904-49-1, Ganglioside GT1c
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sialic acid-containing carbohydrates for immunomodulation and prevention and treatment of infection)
RN 12707-58-3 HCAPLUS
CN Ganglioside GD1a (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 59247-13-1 HCAPLUS
CN Ganglioside GT1b (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 73904-49-1 HCAPLUS
CN Ganglioside GT1c (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L54 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1997:290090** HCAPLUS
DN 126:264312
ED Entered STN: 07 May 1997
TI Preparation of gangliosides as nerve growth stimulants
IN Schnnar, Ronald; Yang, Linda; Hasagawa, Akira
PA Johns Hopkins University School of Medicine, USA
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K0031-715
ICS C07H0003-06; C07H0015-00; C08B0037-00; G01N0033-53
CC 33-8 (Carbohydrates)
Section cross-reference(s): 1, 14, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9707810	A1	19970306	WO 1996-US13660	19960823

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK,

EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR,
LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA

AU 9668585	A1	19970319	AU 1996-68585	19960823
US 5962434	A	19991005	US 1996-702787	19960823
US 6114126	A	20000905	US 1998-95770	19980610
PRAI US 1995-2832P	P	19950825		
US 1996-702787	A1	19960823		
WO 1996-US13660	W	19960823		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9707810	ICM	A61K0031-715
	ICS	C07H0003-06; C07H0015-00; C08B0037-00; G01N0033-53
	IPCI	A61K0031-715 [ICM,6]; C07H0003-06 [ICS,6]; C07H0003-00 [ICS,6,C*]; C07H0015-00 [ICS,6]; C08B0037-00 [ICS,6]; G01N0033-53 [ICS,6]
	IPCR	C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C08B0037-00 [I,A]; C08B0037-00 [I,C*]; G01N0033-68 [I,A]; G01N0033-68 [I,C*]
	ECLA	A61K031/70N5L; C07H003/06; C07H015/10D2; C08B037/00; G01N033/68V2
AU 9668585	IPCI	A61K0031-715 [ICM,6]; C07H0003-06 [ICS,6]; C07H0003-00 [ICS,6,C*]; C07H0015-00 [ICS,6]; C08B0037-00 [ICS,6]; G01N0033-53 [ICS,6]
	IPCR	C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C08B0037-00 [I,A]; C08B0037-00 [I,C*]; G01N0033-68 [I,A]; G01N0033-68 [I,C*]
US 5962434	IPCI	A61K0031-715 [ICM,6]; C07H0005-04 [ICS,6]; C07H0005-00 [ICS,6,C*]
	IPCR	C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C08B0037-00 [I,A]; C08B0037-00 [I,C*]; G01N0033-68 [I,A]; G01N0033-68 [I,C*]
	NCL	514/054.000; 435/007.100; 514/025.000; 536/053.000; 536/055.100
	ECLA	A61K031/70N5L; C07H003/06; C07H015/10D2; C08B037/00; G01N033/68F; G01N033/68V2
US 6114126	IPCI	G01N0033-567 [ICM,7]
	IPCR	C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C08B0037-00 [I,A]; C08B0037-00 [I,C*]; G01N0033-68 [I,A]; G01N0033-68 [I,C*]
	NCL	435/007.210; 435/004.000; 435/007.100; 435/007.200; 435/029.000
	ECLA	A61K031/70N5L; C07H003/06; C07H015/10D2; C08B037/00; G01N033/68V2

AB Substituted gangliosides **NeuAc**-α(2→3) **Gal**-**GalNAc**-**Gal**-**Glu**-L (L = H, hydrophobic group) which can stimulate neuronal growth by inhibiting the neuronal inhibitory activity of myelin-associated glycoprotein (MAG), and a method of using the compds. for stimulating neuronal growth are provided. The invention further provides a method of identifying compds. which inhibit myelin-associated glycoprotein under conditions which allow myelin-associated glycoprotein and the compound to bind and detecting the binding.

ST glycolipid sialate prepn nerve growth stimulant; structure activity nerve growth stimulant ganglioside; ganglioside prepn nerve growth stimulant; myelin assocd glycoprotein inhibitor ganglioside prepn

IT Glycophosphoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(MAG (myelin-associated glycoprotein), inhibitors, gangliosides; preparation of
gangliosides as nerve growth stimulants)

IT **Gangliosides**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(nerve growth stimulants; preparation of gangliosides as nerve growth stimulants)

IT Glycolipids
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(nerve growth stimulants; preparation of gangliosides as nerve growth stimulants)

IT Structure-activity relationship
(preparation of gangliosides as nerve growth stimulants)

IT Nerve growth factor receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(stimulants; preparation of gangliosides as nerve growth stimulants)

IT 169303-96-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(no α/β information given for pyranose; preparation of gangliosides as nerve growth stimulants)

IT 158111-03-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(no α/β information given; preparation of gangliosides as nerve growth stimulants)

IT 57576-21-3P 116950-37-9P 119906-43-3P 124579-05-1P 127663-77-8P
138639-16-4P 151636-13-4P 151868-57-4P 151868-58-5P 157598-65-7P
157922-09-3P 188743-09-1P 188743-11-5P 188743-20-6P 188743-21-7P
188743-22-8P 188743-25-1P 188743-27-3P 188779-39-7P 188779-40-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of gangliosides as nerve growth stimulants)

IT 57-11-4, Octadecanoic acid, reactions 103348-50-1 128500-21-0
134409-17-9 151992-93-7 188743-26-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of gangliosides as nerve growth stimulants)

IT 169303-90-6P 169303-91-7P 169303-92-8P 169303-93-9P 169303-94-0P
169303-95-1P 169303-97-3P 169303-98-4P 169493-80-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of gangliosides as nerve growth stimulants)

L54 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1997:6022** HCAPLUS
DN 126:37037
ED Entered STN: 08 Jan 1997
TI Myeloglycans for treatment of selectin-mediated disorders
IN Handa, Kazuko; Stroud, Mark R.; Levery, Steven B.; Toyokuni, Tatsushi; Hakomori, Sen-itiroh; Song, Yu

PA The Biomembrane Institute, USA; Handa, Kazuko; Stroud, Mark R.; Levery, Steven B.; Toyokuni, Tatsushi; Hakomori, Sen-Itiroh; Song, Yu
SO PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DT **Patent**
LA English
IC ICM A61K0031-725
ICS C08B0037-00
CC 63-3 (Pharmaceuticals)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9634609	A1	19961107	WO 1996-US6120	19960503 <--
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 2003064956	A1	20030403	US 2002-76292	20020219 <--
	US 2003186935	A1	20031002	US 2003-326821	20030425 <--
	US 2005245479	A1	20051103	US 2003-726517	20031204 <--
PRAI	US 1994-353328	A2	19941205 <--		
	US 1995-435664	A	19950505 <--		
	WO 1996-US6120	W	19960503 <--		
	US 1998-952721	B1	19980817 <--		
	US 1999-397961	A1	19990917 <--		
	US 2000-516497	B1	20000301 <--		
	US 2002-76292	B1	20020219 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9634609	ICM	A61K0031-725
	ICS	C08B0037-00
	IPCI	A61K0031-725 [ICM,6]; C08B0037-00 [ICS,6]
	IPCR	A61K0009-127 [I,A]; A61K0009-127 [I,C*]; C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]
	ECLA	A61K009/127B; C07H003/06; C07H015/10D2
US 2003064956	IPCI	A61K0031-739 [ICM,7]; C08B0037-00 [ICS,7]
	IPCR	A61K0009-127 [I,A]; A61K0009-127 [I,C*]; C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]
	NCL	514/054.000
	ECLA	A61K009/127B; C07H003/06; C07H015/10D2
US 2003186935	IPCI	A61K0031-739 [ICM,7]; C08B0037-00 [ICS,7]
	IPCR	A61K0009-127 [I,A]; A61K0009-127 [I,C*]; C07H0003-00 [I,C*]; C07H0003-06 [I,A]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]
	NCL	514/054.000
	ECLA	A61K009/127B; C07H003/06; C07H015/10D2
US 2005245479	IPCI	A61K0031-739 [ICM,7]; C08B0037-00 [ICS,7]
	IPCR	A61K0031-739 [I,A]; A61K0031-739 [I,C*]; C08B0037-00 [I,A]; C08B0037-00 [I,C*]
	NCL	514/054.000

AB Myeloglycan oligosaccharides [**NeuAc**-α(**2**.fwdarw.
3)-**Gal**-β(1→4)- **GlcNAc**
(R1)-β(1→3)-[**Gal**-β(1→4)- **GlcNAc**
(R2)-β(1→3)]3-20; R1, R2 = H, α(1→3)-Fuc] which bind E-selectin are extracted from immune system cells (e.g. lymphocytes) for use as inhibitors of cell aggregation and inflammation. Systematic chemical anal. of glycosphingolipid fractions from normal human neutrophils and HL60 cells failed to detect glycosphingolipids which are binding targets of selectin. Long-chain, unbranched polylactosamine glycosphingolipids

containing these myeloglycan oligosaccharides, rather than sialyl-Lex, are the physiol. E-selectin-binding moieties on immune system cells. The myeloglycan may be attached via the terminal GlcNAc residue to a bifunctional linker and/or an OH group of a carrier, and may be incorporated into microspheres or liposomes. Thus, binding of radiolabeled leukocytes at a selectin-expressing injury site in mice was reduced by pretreatment with myeloglycan.

ST inflammation inhibitor myeloglycan oligosaccharide; lymphocyte lactosamine oligosaccharide binding selectin

IT Selectins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(E-; myeloglycans for treatment of selectin-mediated disorders)

IT Leukocyte
(E-selectin binding of, in injury; myeloglycans for treatment of selectin-mediated disorders)

IT Glycosphingolipids
Oligosaccharides, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lactosamine-containing; myeloglycans for treatment of selectin-mediated disorders)

IT Drug delivery systems
(liposomes; myeloglycans for treatment of selectin-mediated disorders)

IT Drug delivery systems
(microspheres; myeloglycans for treatment of selectin-mediated disorders)

IT New natural products
(myeloglycans (oligosaccharides))

IT Anti-inflammatory agents
Cell aggregation
(myeloglycans for treatment of selectin-mediated disorders)

IT Lymphocyte
(myeloglycans of; myeloglycans for treatment of selectin-mediated disorders)

IT Molecular structure, natural product
(of myeloglycans (oligosaccharides))

IT Carriers
Coupling agents
(oligosaccharide conjugates; myeloglycans for treatment of selectin-mediated disorders)

IT 56-45-1D, L-Serine, oligosaccharide conjugates, biological studies
72-19-5D, Threonine, oligosaccharide conjugates
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of carrier; myeloglycans for treatment of selectin-mediated disorders)

IT 184642-15-7 184642-16-8 184642-17-9 184642-18-0 184642-19-1
184642-20-4 184642-21-5 184642-22-6 184642-24-8 184642-27-1
184642-29-3 184642-31-7 184642-33-9 184642-35-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligosaccharide-terminating; myeloglycans for treatment of selectin-mediated disorders)

L54 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1992:41885** HCAPLUS
DN 116:41885

ED Entered STN: 08 Feb 1992
TI Conformational analysis of sialyloligosaccharides
AU Sabesan, Subramaniam; Bock, Klaus; Paulson, James C.
CS Cent. Res. Dev. Exp., Du Pont, Wilmington, DE, 19880-0328, USA
SO Carbohydrate Research (**1991**), 218, 27-54
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
CC 33-4 (Carbohydrates)
Section cross-reference(s): 22
AB The conformational properties of several sialyloligosaccharides present as terminal sequences in N- and O-linked carbohydrate groups of glycoproteins, have been analyzed based on the NMR data of selected sialosides. The compds. examined include representatives of the α-D-**NeuAc**-(2 → 6)-β-D- **Gal**-(1 → 4)-β-D- **GlcNAc**, α-D- **NeuAc**-(**2** → **3**)-β-D- **Gal**-(1 → 4)-β-D-**GlcNAc**, α-D- **NeuAc**-(**2** → **3**)-β-D- **Gal**-(1 → 3)-β-D- **GlcNAc**, and α-D- **NeuAc**-(**2** → **3**)-β-D-**Gal**-(1 → 3)-β-D- **GalNAc** series. Two deuterated sialosides were prepared by enzymic sialylation of 6-deuterated galactose derivs. of Me β-D-galactopyranoside and lactoside. These were useful for the unambiguous establishment of the "gt" orientation of the flexible C-6 methylene unit of the galactose through 1H-1H coupling consts. Of all the (2 → 6) sialosides examined, only the deuterated di- and trisaccharide afforded useful nuclear Overhauser enhancement data that could be used to evaluate the global min.-energy conformations. Hard-sphere exoanomeric effect calcns. estimated the glycosidic torsion angles for the global min.-energy conformer of α-D-NeuAc-(2 → 6)-β-D-Gal linkages to be -163/-132/61° (θ, ψ, and ω, resp.). However, the potential energy well surrounding this global min. was very shallow and indicated a broad population distribution of conformers which are illustrated by the isoenergy contour maps. The observation of NOE between the H-3ax- and H-6R of the galactose in two deuterated (2 → 6) sialosides, supported the presence of one of the global min.-energy conformers. The conformational anal. carried out for the di- and trisaccharide [α-D-NeuAc-(2 → 6)-β-D-Gal-OMe and α-D-NeuAc-(2 → 6)-β-D-Gal-(1 → 4)-β-D-Glc-OMe resp.] was then extended to sialoside linkages of other tri- and pentasaccharides by comparison of their 1H- and 13C NMR chemical shifts. HSEA calcns. for the (**2** → **3**) sialosides indicated the potential energy well containing the global min. energy-conformer (θ, ψ = -160 +4, -11 +2°) was deeper than the one estimated for the (2 → 6) sialosides. The NOE data are consistent with the distribution of the majority of conformers around the lowest-energy one in solution CPK models highlighting the topog. differences between the lowest-energy conformations of α-(2 → 6) and α-(**2** → **3**) sialosides are presented.
ST sialyloligosaccharide conformation; oligosaccharide sialo conformation; NMR sialyloligosaccharide conformation; NOE sialyloligosaccharide conformation
IT Nuclear magnetic resonance
Overhauser effect
(of sialyloligosaccharides)
IT Conformation and Conformers
(of sialyloligosaccharides, NMR and NOE in relation to)
IT Oligosaccharides
RL: PRP (Properties)
(sialo-, conformation of, NMR and NOE in relation to)

IT 1824-94-8, Methyl β-D-galactopyranoside 35669-28-4 68774-40-3
86594-19-6 115043-47-5 138290-70-7
RL: PRP (Properties)
(NMR of, in relation to conformation of sialyloligosaccharides)
IT 100605-28-5 100605-30-9 108964-07-4 123314-84-1 132072-01-6
138290-71-8 138290-72-9 138290-73-0 138290-74-1 138290-75-2
138290-76-3 138290-77-4 138290-78-5 138290-79-6 138290-80-9
138290-81-0 138290-82-1 138290-83-2 138290-84-3
RL: PRP (Properties)
(conformation of, NMR and NOE in relation to)

L54 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1990:457303** HCAPLUS
DN 113:57303
ED Entered STN: 17 Aug 1990
TI Unbranched aramide polysaccharide tumor antigens for antibody production and antitumor vaccines
IN Nudelman, Edward D.; Levery, Steven B.; Stroud, Mark R.; Salyan, Mary Ellen K.; Hakomori, Senitiroh
PA Biomembrane Institute, USA
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT **Patent**
LA English
IC ICM C07H0015-00
ICS C08B0037-00; A61K0039-00; A61K0037-20; C12P0021-00; A61K0039-395
CC 15-2 (Immunochemistry)
Section cross-reference(s): 14
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 344955	A2	19891206	EP 1989-305153	19890522 <--
	EP 344955	A3	19900530		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	US 5030723	A	19910709	US 1988-200160	19880531 <--
	JP 02110102	A2	19900423	JP 1989-140223	19890531 <--
PRAI	US 1988-200160	A	19880531 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 344955	ICM	C07H0015-00
	ICS	C08B0037-00; A61K0039-00; A61K0037-20; C12P0021-00; A61K0039-395
	IPCI	C07H0015-00 [ICM,4]; C08B0037-00 [ICS,4]; A61K0039-00 [ICS,4]; A61K0037-20 [ICS,4]; C12P0021-00 [ICS,4]; A61K0039-395 [ICS,4]
	IPCR	A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0039-00 [N,A]; A61K0039-00 [N,C*]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C07K0016-18 [I,C*]; C07K0016-30 [I,A]; G01N0033-66 [I,A]; G01N0033-66 [I,C*]; G01N0033-92 [I,A]; G01N0033-92 [I,C*]
US 5030723	IPCI	C07H0013-06 [ICM,5]; C07H0013-00 [ICM,5,C*]; C07H0005-04 [ICS,5]; C07H0005-00 [ICS,5,C*]
	IPCR	A61K0038-00 [N,A]; A61K0038-00 [N,C*]; A61K0039-00 [N,A]; A61K0039-00 [N,C*]; C07H0015-00 [I,C*]; C07H0015-10 [I,A]; C07K0016-18 [I,C*]; C07K0016-30 [I,A]; G01N0033-66 [I,A]; G01N0033-66 [I,C*]; G01N0033-92 [I,A]; G01N0033-92 [I,C*]
	NCL	536/053.000; 536/004.100; 536/018.200; 536/055.100; 536/119.000

JP 02110102 IPCI C08B0037-00 [ICM,5]; A61K0039-00 [ICS,5]; C07K0015-06 [ICS,5]; C12P0021-08 [ICS,5]; G01N0033-574 [ICS,5]; G01N0033-577 [ICS,5]; C12P0021-08 [ICI,5]; C12R0001-91 [ICI,5]

AB Two substantially pure unbranched ceramide polysaccharide type 2 chains have the following structures: **NeuAc**.alpha.(**2**.fwdarw. **3**)**Gal**.beta.(1→4) **GlcNAc**
β(1→3) **Gal**.beta.(1→4) **GlcNAc**
[(3←1)Fucα]β(1→3)Galβ(1→4)
GlcNAc.beta.(1→3) **Gal**.beta.(1→4)
GlcNAc.beta.(1→3) **Gal**.beta.(1→4) **Glc**
-Cer (I; Fuc = fucose; Cer = ceramide; **NeuAc** = sialic acid and desialylated I. The 2 are differentiation-dependent tumor-associated antigens useful in antibody production or in vaccines. The antigens were purified from the ganglioside fractions of colonic cancer tissue by HPLC and high-performance TLC using monoclonal antibody ACFH-18 to identify those fractions containing the antigens. They were characterized by NMR spectrometry, various mass spectrometry methods, and enzymic and chemical degradation methods.

ST ceramide polysaccharide tumor antigen; antibody ceramide polysaccharide tumor antigen; fucosyl glycolipid differentiation tumor antigen

IT Vaccines
(for tumors, differentiation-dependent tumor-associated unbranched ceramide polysaccharides in)

IT Ceramides
RL: BIOL (Biological study)
(polysaccharides containing, as differentiation-dependent cancer-associated antigens)

IT Antibodies
RL: BIOL (Biological study)
(to differentiation-dependent tumor-associated unbranched ceramide polysaccharides)

IT Neoplasm inhibitors
(vaccines containing differentiation-dependent tumor-associated unbranched ceramide polysaccharides)

IT Intestine, neoplasm
(colon, differentiation-dependent tumor-associated unbranched ceramide polysaccharides of, characterization and purification of)

IT Polysaccharides, biological studies
RL: BIOL (Biological study)
(fucose-containing, ceramide- and, as differentiation-dependent cancer-associated antigens)

IT Antibodies
RL: BIOL (Biological study)
(monoclonal, to differentiation-dependent tumor-associated unbranched ceramide polysaccharides)

IT Antigens
RL: BIOL (Biological study)
(tumor-associated, unbranched ceramide polysaccharide as)

IT 115965-73-6 117385-15-6
RL: BIOL (Biological study)
(as differentiation-dependent cancer-associated antigen)

IT 2438-80-4
RL: BIOL (Biological study)
(polysaccharides containing, as differentiation-dependent cancer-associated antigens)

L54 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1986:512930** HCAPLUS
DN 105:112930

ED Entered STN: 03 Oct 1986
TI Structure of a new disialoganglioside GD1c from spontaneous murine thymoma
AU Bartoszewicz, Zbigniew; Koscielak, Jerzy; Pacuszka, Tadeusz
CS Dep. Radiobiol. Health Prot., Inst. Nucl. Chem. Technol., Warsaw, 03-195, Pol.
SO Carbohydrate Research (1986), 151, 77-88
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA English
CC 14-1 (Mammalian Pathological Biochemistry)
Section cross-reference(s): 33
AB A major mono- and a disialoganglioside were isolated and purified to homogeneity from a spontaneous thymoma that occurs in AKR mice. Compositional and methylation analyses and the use of exoglycosidases established the monosialoganglioside to be αNeu(2→3)β **Gal**(1→3).beta .**GalNAc**(1→4).beta .**Gal** (1→4) **Glc**(1→1)Cer (where Neu = **neuraminic** acid and Cer = ceramide) and the disialoganglioside to be α **NeuAc**(2→8).alpha .**NeuAc**(2→3)β **Gal**(1→3).beta .**GalNAc**(1→4).beta .**Gal** (1→4) **Glc**(1→1)Cer (GD1c). A possible pathway for the biosynthesis of this disialoganglioside is presented.
ST thymoma ganglioside GD1c structure
IT Carbohydrates and Sugars, biological studies
Fatty acids, biological studies
RL: BIOL (Biological study)
(of gangliosides, of thymoma)
IT **Gangliosides**
RL: BIOL (Biological study)
(of thymoma, isolation and structure of)
IT Thymus gland
(neoplasm, thymoma, ganglioside GD1c of, isolation and structure of)
IT Lymphoma
(thymoma, ganglioside GD1c of, isolation and structure of)
IT 104137-21-5 104137-85-1
RL: BIOL (Biological study)
(of thymoma, isolation and structure of)

L54 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2006 ACS on STN
AN **1974:517902** HCAPLUS
DN 81:117902
ED Entered STN: 12 May 1984
TI Gangliosides in human erythrocytes
AU Gregor, Anita; Piasek, Andrzej; Koscielak, Jerzy
CS Dep. Biochem., Inst. Haematol., Warsaw, Pol.
SO Acta Haematologica Polonica (1974), 5(2), 163-7
CODEN: AHPLBO; ISSN: 0001-5814
DT Journal
LA Polish
CC 13-5 (Mammalian Biochemistry)
Section cross-reference(s): 6
AB Four gangliosides were obtained from human erythrocytes by extraction with EtOH. They were monosialosylolactosylceramide (hematoside), monosialosyllacto-N-neotetraosylceramide, and 2 new gangliosides which accounted, resp., for 19.8%, 73.5%, 3.5%, and 3.2% of all EtOH-extractable gangliosides. One of the new gangliosides has the probable structure: **Sial**-(2→3)- **Gal**-(1→4)[or(1→3)]- **GlcNAc**-(1→3)- **Gal**-(1→4) [or(1→3)]- **GlcNAc**-(1→3)- **Gal**(1→4)- **Glc** -ceramide.

ST erythrocyte ganglioside
IT Erythrocyte
(gangliosides and hematosides of)
IT **Gangliosides**
Hematosides
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(of erythrocyte)

=> => fil reg
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DICTIONARY FILE UPDATES: 21 JUN 2006 HIGHEST RN 888750-16-1

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* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
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http://www.cas.org/ONLINE/UG/regprops.html

=> => d ide can tot

L55 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
RN **73904-49-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN Ganglioside GT1c (9CI) (CA INDEX NAME)
OTHER NAMES:
CN GT1c
MF Unspecified
CI COM, MAN
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
23 REFERENCES IN FILE CA (1907 TO DATE)
23 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 143:111108

REFERENCE 2: 139:144015

REFERENCE 3: 137:198496

REFERENCE 4: 134:54889

REFERENCE 5: 132:320018

REFERENCE 6: 132:91171

REFERENCE 7: 131:212001

REFERENCE 8: 131:57290

REFERENCE 9: 129:147194

REFERENCE 10: 129:52407

L55 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
RN **59247-13-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN Ganglioside GT1b (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Ganglioside G1
CN GT1b
DR 60362-39-2, 62463-01-8
MF Unspecified
CI COM, MAN
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1031 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1031 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:425509

REFERENCE 2: 144:389759

REFERENCE 3: 144:308118

REFERENCE 4: 144:268862

REFERENCE 5: 144:254312

REFERENCE 6: 144:249259

REFERENCE 7: 144:209480

REFERENCE 8: 144:209428

REFERENCE 9: 144:168928

REFERENCE 10: 144:121844

L55 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
RN **12707-58-3** REGISTRY
ED Entered STN: 16 Nov 1984
CN Ganglioside GD1a (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Ganglioside B1
CN Ganglioside G3
CN Ganglioside GD1a
CN Ganglioside GII
CN GD1a
DR 54952-11-3, 55598-65-7, 59247-12-0, 71537-59-2, 82497-00-5
MF Unspecified
CI COM, MAN
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, EMBASE, IPA, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1339 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:486909

REFERENCE 2: 144:447101

REFERENCE 3: 144:425509

REFERENCE 4: 144:389759

REFERENCE 5: 144:388728

REFERENCE 6: 144:254312

REFERENCE 7: 144:228715

REFERENCE 8: 144:209480

REFERENCE 9: 144:209428

REFERENCE 10: 144:186201

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MOST RECENT DERWENT UPDATE: 200639 <200639/DW>
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=> d l79 all abeq tech abex tot

L79  ANSWER 1 OF 2  WPIX  COPYRIGHT 2006 THE THOMSON CORP on STN
AN   2004-082154 [08]   WPIX
DNC  C2004-033868
TI   Mixture of gangliosides, useful in dietetic, pharmaceutical and
     food compositions, includes C20 0 N-acyl residues for increased biological
     activity.
DC   B03 D13 E13
IN   BEERMANN, C; BODE, L; BOEHM, G
PA   (NUTR-N) NUTRICIA NV
CYC  36
PI   WO 2003106474   A2 20031224 (200408)* GE   20    C07H015-10     <--
        RW: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO
            SE SI SK TR
         W: AL CA CN ID JP LT LV MK RO US
     DE 10226367     A1 20031224 (200410)             C07H015-04     <--
     EP 1511756      A2 20050309 (200518)  GE         C07H015-10     <--
          R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV
             MC MK NL PT RO SE SI SK TR
     US 2005075310   A1 20050407 (200525)             A61K031-739    <--
     JP 2005530824   W  20051013 (200568)       18    C07H015-10     <--
     CN 1659177      A  20050824 (200604)             C07H015-10     <--
ADT  WO 2003106474 A2 WO 2003-EP5611 20030527; DE 10226367 A1 DE 2002-10226367
     20020613; EP 1511756 A2 EP 2003-735484 20030527, WO 2003-EP5611 20030527;
     US 2005075310 A1 WO 2003-EP5611 20030527, US 2004-497173 20040609; JP
     2005530824 W WO 2003-EP5611 20030527, JP 2004-513305 20030527; CN 1659177
     A CN 2003-813571 20030527
FDT  EP 1511756 A2 Based on WO 2003106474; JP 2005530824 W Based on WO
     2003106474
PRAI DE 2002-10226367     20020613
IC   ICM  A61K031-739; C07H015-04; C07H015-10
     ICS  A23L001-03; A23L001-30; A23L001-48; A61K031-7004; A61K031-7028;
          A61K031-7032; A61P003-02; C08B037-00
AB   WO2003106474 A UPAB: 20040202
     NOVELTY - Mixture (A) of gangliosides (I) in which at least
     10wt.% of (I) are N-acylated by a C20:0 fatty acid is new.
          DETAILED DESCRIPTION - Mixture (A) of gangliosides of
     formula (I) in which at least 10 weight% (I) contain C(O)R1 derived from a
     C20:0 fatty acid are new.
          sugar-OCH2CH(NHC(O)R1)-CH(OH)CH=CHR2 (I)
          C(O)R1 = fatty acid residue;
          R1 = linear, saturated alkyl of at least 10C; and
```

R2 = linear alkyl or alkenyl with 1-3 double bonds, of at least 10C.

An INDEPENDENT CLAIM is also included for dietetic, pharmaceutical and food compositions containing (A).

ACTIVITY - Cytostatic; Immunostimulatory; Neuroprotective.

No details of tests for these activities are given.

MECHANISM OF ACTION - (I) are involved in development of the neonatal intestinal tract (including its immune system), have anticancer activity and induce T cell differentiation and increase both synthesis of prostaglandins and expression of cyclooxygenase.

USE - (A) is used for preparation of dietetic, pharmaceutical (human or veterinary) or food compositions, e.g. prepared meals, nutritional supplements or formula feeds, such as dairy products, baby foods, parenteral feeds, infusion solutions and products for pregnant women. (A) can also be used to improve development of the intestinal tract, including its immune system, and of the neuronal system and also to treat destructive alterations in these systems.

ADVANTAGE - Inclusion of the C20:0 fatty acid improves biological activity and particularly provides better mobility in the cell membrane, resulting in stronger receptor-mediated signals, ion-channel activity, and activity of membrane-bound enzymes.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B04-C02X; B04-L03C; B07-A02; B10-A07; B10-A09B; B14-G01; B14-G03; B14-H01; B14-J01A; B14-J02; B14-L01; D03-H01T2; E07-A02

TECH UPTX: 20040202

TECHNOLOGY FOCUS - BIOLOGY - Preferred Mixtures: C(O)R1 is derived from (a) C20:0 at 10-15wt.%; (b) C18:0 at C18:0 to C20:0 ratio 1-3; and (c) C23:0 at not over 10 wt.%. The mixture comprises (I) from natural animal and/or plant sources, either in native form or modified, and can be formulated as an aqueous emulsion, as a component of a fat mixture or incorporated into a finished food, nutrient supplement or food formula. Preferred Materials: (I) are extracted from natural sources by standard methods, and optionally modified (a) by enzymatic transesterification or (b) chemical deacylation to **lysogangliosides**, then esterification to introduce the required combination of C(O)R1 residues.

ABEX UPTX: 20040202

EXAMPLE - Glycosphingolipids extracted from buttermilk were incubated with ceramide-N-deacylase, then transesterified with selected fatty acids to produce a modified product with N-acyl fatty acid distribution 6-9 weight% C18:0 and 60-90 weight% C20:0. The product was added, at 0.2-500 mg, to a commercial infant feed (Aptamil, RTM) that contained 11.8 g protein; 56.9 g carbohydrate; 24.9 g fat; 2.5 g minerals and vitamins and 45 mg taurine.

L79 ANSWER 2 OF 2 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2003-697397 [66] WPIX

DNC C2003-191691

TI Immunomodulation, immunosuppression and treatment of infections, by administration of cellular interaction modulating sialylated carbohydrate, e.g. in nutritional, dietetic or pharmaceutical composition.

DC B03 B04 C02 C03 D13

IN **BOEHM, G; FINKE, B; KELM, S; SCHMITT, J J; STAHL, B**; SLAGHIUS, J; **SCHMITT, J**

PA (NUTR-N) NUTRICIA NV; (BOEH-I) BOEHM G; (FINK-I) FINKE B; (KELM-I) KELM S; (SCHM-I) SCHMITT J; (STAH-I) STAHL B

CYC 36

PI WO 2003064439 A2 20030807 (200366)* GE 21 C07H015-00 <--

RW: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI SK TR

W: AL CA CN ID JP LT LV MK RO US

DE 10204000 A1 20030814 (200366) C08B037-00 <--
EP 1470142 A2 20041027 (200471) GE C07H007-027 <--
R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR
US 2005070464 A1 20050331 (200524) A61K038-16 <--
CN 1646554 A 20050727 (200577) C07H007-027 <--

ADT WO 2003064439 A2 **WO 2003-EP980 20030131**; DE 10204000 A1 **DE 2002-10204000 20020201**; EP 1470142 A2 EP 2003-734720 20030131, **WO 2003-EP980 20030131**; US 2005070464 A1 **WO 2003-EP980 20030131, US 2004-502049 20040730**; CN 1646554 A CN 2003-807549 20030131

FDT EP 1470142 A2 Based on WO 2003064439

PRAI **DE 2002-10204000 20020201**

IC ICM A61K038-16; **C07H007-027**; **C07H015-00**; **C08B037-00**
ICS A23L001-09; A23L001-30; **A61K031-702**; **A61K031-715**; **A61K031-739**; A61P037-00; **C07H017-04**

AB WO2003064439 A UPAB: 20031014
NOVELTY - The use of sialylated carbohydrates (I) (in which the carbohydrate residues are optionally bonded to carbohydrate residues or carriers) for immunomodulation, immunosuppression and treatment of infections in humans and animals.

DETAILED DESCRIPTION - The use of sialylated carbohydrates of formula (I) (in which the carbohydrate residues are optionally bonded to carbohydrate residues or carriers) for immunomodulation, immunosuppression and treatment of infections in humans and animals.

Sia = alpha 2-3 bonded sialic acid (or derivative);
Gal = galactose monosaccharide unit;
HexNac = N-acetylated galactosamine or glucosamine monosaccharide unit (GalNAc or GlcNAc);
Hex = glucose or galactose monosaccharide unit;
Csub = HexNac, Hex or direct bond;
n = 1-50;
Vsub = OH (when n = 1); or a carbohydrate residue or carrier T (to which n of the bracketed carbohydrate residues are directly bonded);
X = sialic acid (or derivative) (to which at least one further sialic acid (or derivative) residue is optionally bonded in alpha 2-3 manner); a phosphate, sulfate or carboxy group; or a monosaccharide with a phosphate, sulfate or carboxy group (and provided that only one group X is present).

INDEPENDENT CLAIMS are also included for:
(1) nutritional, dietetic or pharmaceutical compositions containing (I); and
(2) a method for immunomodulation, immunosuppression and treatment of infections in humans and animals, involving administration of (I) in a form other than human milk.

ACTIVITY - Immunomodulator; Immunosuppressive; Antibacterial.
MECHANISM OF ACTION - Cell-to-cell Interaction Modulator; Cellular Adhesion Inhibitor.
No biological data given. However, (I) modulate immune reactions by modulating the interactions of cells (e.g. lymphocytes and endothelial cells) with each other; and modulate the adhesion of pathogens (e.g. bacteria, spores, viruses, viroids, prions, fungi, unicellular or multicellular parasites, toxins or heavy metal cations) to mammalian cells.

USE - (I) are especially used for the prevention and treatment of infections of the gastrointestinal tract, blood system, respiratory tract, urogenital tract or the nose and throat region (all claimed).
Dwg.0/0

FS CPI

FA AB; GI; DCN
MC CPI: B04-B01B; B04-C01; B04-C02; B04-C03; B04-N04; B04-N06; B07-A02B; B14-A01; B14-G02; B14-G03; B14-L01; B14-L06; C04-B01B; C04-C01; C04-C02; C04-C03; C04-N04; C04-N06; C07-A02B; C14-A01; C14-G02; C14-G03; C14-L01; C14-L06; D03-D; D03-H01T2
ABEX UPTX: 20031014
SPECIFIC COMPOUNDS - 6 Compounds (I) are specified in the claims, i.e. disialyl-lacto-N-tetraose, disialyl-lacto-N-neo-tetraose, glycomacropeptide, **ganglioside** G(D1a), **ganglioside** G(T1b) and **ganglioside** G(T1c).

ADMINISTRATION - (I) are specifically administered orally, lingually, nasally, bronchially, vaginally, topically (to the skin or mucosa), via a gastric probe or by infusion, at a dosage of at least 1 mg/kg, in nutritional, dietetic or pharmaceutical compositions optionally also containing one or more of other carbohydrates, other active agents and/or other conventional components (especially auxiliaries such as diluents, humectants, thickeners, flavourings, sweeteners or carriers in the case of pharmaceutical compositions; or other foodstuff components in the case of nutritional or dietetic compositions) (all claimed).

EXAMPLE - Conventionally prepared instant tea powder (100 g) was mixed with an unspecified sialylated carbohydrate (2 g). A drink obtained by dissolving the obtained tea powder (3.8 g) in hot water (100 ml) was administered 3 times daily.

DEFINITIONS - Preferred Definitions:
Sia = acetyl-neuraminic acid (NeuAc) or N-glycolyl-neuraminic acid (NeuGc);
sialic acid derivative (in Sia or X) = O-acyl derivative, especially O-acetyl derivative;
carrier T = peptide, protein, polymer or biopolymer (bonding to peptides or proteins preferably being N- or O-glycosidic); or especially a glycolipid (particularly a **ganglioside**; and
carbohydrate-Vsub = mono-, oligo- or polysaccharide residue.

=> d his

(FILE 'HOME' ENTERED AT 11:47:05 ON 22 JUN 2006)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 11:47:24 ON 22 JUN 2006
L1 1 S US20050070464/PN OR (US2004-502049# OR WO2003-EP980 OR DE2002
E STAHL B/AU
L2 146 S E3-E9,E14
E STAEHL B/AU
E KELM S/AU
L3 93 S E3-E5,E7-E9
E BOEHM G/AU
L4 333 S E3-E8,E33-E37,E41,E42
E BOHM G/AU
L5 200 S E3-E7,E25-E28
E FINKE B/AU
L6 28 S E3-E6
E SCHMITTJ/AU
E SCHMITT J/AU
L7 504 S E3-E24
L8 31 S E71-E73
E NUTRICIA/PA,CS

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L9          116 S E3-E26
                E NV NUTRICIA/PA,CS
                E N V NUTRICIA/PA,CS
L10          90 S E3-E6
                E SIALIC/CT
L11       10964 S E4+OLD,NT OR E11+OLD,NT
L12        9389 S E4,E11-E25
                E E4+ALL
L13          15 S E1
                E E2+ALL
L14          36 S L1-L10 AND L11-L13
                E GANGLIOSIDE/CT
L15        1339 S E5
L16        1031 S E13
                E E14+ALL
L17        6624 S E30,E31
L18        1546 S E37,E42
L19          20 S GANGLIOSIDE GT1C
L20         866 S GANGLIOSIDE GT1B
L21        1105 S GANGLIOSIDE GD1A

     FILE 'REGISTRY' ENTERED AT 11:56:09 ON 22 JUN 2006
L22           3 S 12707-58-3 OR 59247-13-1 OR 73904-49-1

     FILE 'HCAPLUS' ENTERED AT 11:57:10 ON 22 JUN 2006
L23        1554 S L22
L24        2170 S GANGLIOSIDE()(B1 OR G3 OR GII OR G1) OR GD1A OR GT1B OR GT1C
L25        7357 S L15-L21,L23,L24
L26           3 S L14 AND L25
L27           1 S L26 NOT (117:149260 OR 110:110176)/DN
L28           1 S SIA?(S)GAL(S)HEXNAC(S)HEX
L29           1 S L1,L27,L28
L30          33 S L14 NOT L26-L29
L31         665 S L25 AND L11-L13
                E CARBOHYDRATE/CT
L32           1 S E3
L33       66379 S E32
                E E19+ALL
                E CARBOHYDRATE/CT
                E E3+ALL
                E E2+ALL
                E E2+OLD
L34          28 S L31 AND L32,L33
L35           0 S L31 AND E3+OLD
L36          18 S L34 NOT (TOXICOL? OR BIOCHEM?(L)METHOD?)/SC
L37          17 S L36 NOT GENETIC?/SC
L38           8 S L37 AND (PHARMACOL? OR PHARMACEUT? OR FOOD? OR FEED? OR NUTRI
                SEL DN AN 2 3
L39           2 S L38 AND E1-E6
L40           2 S L29,L39
L41          20 S L34 NOT L38
L42         391 S (SIAL OR NEURAM? OR NEUGC OR NEUAC)(S)GAL(S)(GALNAC OR GLCNAC
L43          56 S L42 AND L25
                SEL AN L43 9 33 52
L44           3 S L43 AND E7-E12
L45           5 S L40,L44
L46         335 S L42 NOT L43
L47         320 S L46 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
L48         176 S L47 AND 2(1W)3
L49          11 S L48 AND P/DT
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                SEL AN 9 11
L50           2 S L49 AND E13-E16
L51           7 S L45,L50
L52         165 S L48 NOT L49-L51
                SEL AN 86
L53           1 S E17-E18 AND L52
L54           8 S L51,L53 AND L1-L21,L23-L53

     FILE 'HCAPLUS' ENTERED AT 12:31:26 ON 22 JUN 2006
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 12:31:53 ON 22 JUN 2006
L55           3 S E19-E21

     FILE 'WPIX' ENTERED AT 12:32:21 ON 22 JUN 2006
L56           1 S L1
                E STAHL B/AU
L57          56 S E3-E7
                E STAEHL B/AU
L58           1 S E3
                E KELM S/AU
L59          14 S E3,E4
                E BOEHM G/AU
L60         167 S E3-E6
                E BOHM G/AU
L61         126 S E3-E8
                E FINKE B/AU
L62           6 S E3,E4
                E SCHMITT J/AU
L63         399 S E3-E21
L64          12 S L57-L63 AND C07H/IPC,IC,ICM,ICS,ICA,ICI
L65           9 S L57-L63 AND C08B/IPC,IC,ICM,ICS,ICA,ICI
L66          14 S L57-L63 AND (A61K031-702 OR A61K031-715 OR A61K031-739)/IPC,I
L67          24 S L64-L66
L68           7 S L67 AND (?SIAL? OR ?NEURAM? OR ?NEUGC? OR ?NEUAC?)
L69           5 S L68 NOT TRANSFERASE
L70           2 S L67 AND ?GANGLIOSID?
L71           0 S L67 AND (B1 OR G3 OR GII OR G1)
L72           0 S L67 AND (GD1A OR GT1B OR GT1C)
                E GANGLIOSIDE/CN
L73           3 S E3-E5,E9,E10
L74           1 S E13
L75           4 S L73,L74
L76           1 S L67 AND (R20166  OR R20160 OR RA0ICO OR RA0GO1)/DCN
L77           1 S L67 AND L75/DCR
L78           2 S L70,L76,L77
L79           2 S L56,L78
L80           4 S L69 NOT L79

     FILE 'WPIX' ENTERED AT 12:40:46 ON 22 JUN 2006

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